

An Analysis of the Impacts of the AIR Funding Formula Proposal on New Mexico School Districts

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Rural School and Community Trust



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The Rural School and Community Trust (Rural Trust) is the leading national nonprofit organization addressing the crucial relationship between good schools and thriving communities. Working in some of the poorest, most challenging rural places, the Rural Trust involves young people in learning linked to their communities, improves the quality of teaching and school leadership, advocates for appropriate state educational policies, and addresses the critical issue of funding for rural schools.

Highlights of Findings

This report presents findings from an investigation of the impact of the funding formula proposal commissioned by the New Mexico Funding Formula Task Force (FFTF) and developed by American Institutes of Research (AIR).

All Greater New Mexico districts (that is, all districts except Albuquerque) were ranked according to the percent gain or loss in per pupil state aid under the formula proposed in HB 241, as compared to the current funding formula. Districts were then separated into five groups based on their percentage gain, each group containing about one-fifth of the students. The five groups are labeled: Most-Gain, Next-Most-Gain, Middle-Gain, Next-Least-Gain, Least-Gain. In sum:

1. Under the proposed new formula, each of the five groups would gain state aid, and all but four individual districts would gain as well.
2. Twenty-four of 29 districts in the Most-Gain group are located in counties lying south and east of a line running from Quay County to Catron County. By contrast, 11 of the 14 districts in the Least-Gain group are north of the same line, all in or east of the I-25 corridor north of Albuquerque.
3. Increases resulting from the proposed formula would generally go to the state's most economically challenged districts, with each successively higher gain group facing more challenging socio-economic indicators. The exception is the Least-Gain group. These 14 districts, on average, face worse socio-economic conditions than the 27 districts in the next two groups that gain more from the proposed formula.
4. The Most-Gain group is predominantly rural, and the Next-Most-Gain group is also heavily rural (but majority suburban). Each successively lower gain group is proportionately less rural.
5. The Most-Gain group has the highest number (12,883) and highest incidence (34.1%) of English Language Learner (ELL) enrollment and of Hispanic enrollment (75.2%), and the second fastest rate of increase of ELL enrollment.
6. Smaller districts fare well. The average district enrollment is smaller with each successively higher gain group. Districts in the two groups gaining the least from the proposed formula have an average enrollment about three times larger than the districts in the Most-Gain group.
7. Many academically low-performing districts are in the Least-Gain group, suggesting that the benefits of the proposed formula will not make it to some of the districts most in need of improvement in academic achievement.
8. Compared to other rural and to non-rural districts, rural districts in the most remote areas have the highest average poverty rate, the highest American Indian enrollment rate, the highest combined American Indian and Hispanic enrollment rate, the lowest combined academic proficiency rate, and the smallest average district size. These districts, on average, would receive the largest percentage increase in state aid (21.7%) under the proposed formula.

Introduction

Appointed by the New Mexico Legislature and Governor Bill Richardson, the Funding Formula Task Force (FFT) was charged with providing recommendations regarding the state's public education funding mechanism. The FFT contracted with American Institutes of Research (AIR), which conducted a comprehensive study of the current New Mexico public school funding formula and presented recommendations for a proposed new formula. The AIR report was submitted to the New Mexico Legislature in January 2008. The resulting proposed legislation (HB 241) did not pass during the thirty day legislative session, but may be reconsidered during the 2009 legislative session.

This report uses data from the AIR report and from other publicly available sources (e.g., the U.S. Census Bureau, the National Center for Education Statistics) to investigate the expected impact of the proposed formula on school districts with varying characteristics. There are more recent estimates of the distributional effect of the formula from the New Mexico Public Education Department (which estimates the Department has invited public school districts to respond to, particularly with respect to the accuracy of the underlying variables on which they are based). We use the AIR estimates even though they are a year older because they are part of a comprehensive database containing all variables on which the formula is based.

Gain Quintiles

We began by ranking 88 school districts (all of New Mexico's districts, excluding Albuquerque) from high to low according to the percentage increase in state aid proposed by the AIR formula, then segmented this distribution into five groups (from "Most-Gain" to "Least-Gain") such that the total number of students attending the districts in each group was as equal as possible (see Appendix A for a listing of districts in each of the quintiles). In each of the tables below we show the data for Albuquerque for the benefit of readers who wish to compare it with the Greater New Mexico quintiles.

Table 1 shows the proposed absolute and percent changes in per pupil funding for Greater New Mexico (all districts except Albuquerque), for each of the quintile groups, and for Albuquerque.

Table 1 - Proposed Changes in State Aid Per Pupil by Gain Categories

Category	Actual State Aid Per Pupil 06-07	AIR Proposed State Aid Per Pupil 06-07	Dollar Difference	Percent Difference
Greater New Mexico	6,570	7,596	1,026	15.6
Most-Gain Quintile	6,792	8,865	2,073	30.5
Next-Most-Gain Quintile	6,442	7,879	1,437	22.3
Middle-Gain Quintile	6,435	7,375	940	14.6
Next-Least-Gain Quintile	6,399	7,053	653	10.2
Least-Gain Quintile	6,775	7,128	353	5.2
Albuquerque	6,056	6,653	597	9.9

¹See <http://www.nmschoalfunding.org/>

The biggest gainers and the smallest gainers were the only two quintiles whose actual state aid per pupil in 2006-07 was above the average for Greater New Mexico in that year. Under the AIR proposal, all of the quintile groups gain (indeed, all districts gain except four in the Least-Gain quintile that would actually receive reduced state aid). The proposed funding increases for Greater New Mexico range from an average of \$353 per pupil (5.2%) for the quintile with the least gain to \$2,073 per pupil (30.5%) for the quintile with the most gain, averaging \$1,026 per pupil (15.4%) across all districts.

Regional Distributions

Twenty four (24) of 29 districts in the Most-Gain quintile are located in counties lying south and east of a line running from Quay County to Catron County. Seventeen of those 24 are either in the four High Plains counties on the Eastern border with Texas (Quay, Curry, Roosevelt, and Lea) or in the six Chihuahuan Desert counties on the Southern border with Texas and Mexico (Hidalgo, Luna, Dona Ana, Otero, Eddy, and Lea).

Districts in the Next-Most-Gain quintile lie predominantly north and west of the same line. By contrast, 11 of the 14 districts in the bottom quintile of smallest gainers are north of the same line, all in or east of the I-25 corridor north of Albuquerque.

See appendix B for a map illustrating these regional distributions.

Socio-Economic Status

Next, we looked at measures of socio-economic status (SES) for each of the above described quintile groups (see Table 2).

Table 2 - SES Characteristics by Gain Categories

Category	Percent Poverty	Percent Child Poverty	Unemployment Rate	Percent Adults without H.S. Diploma
Greater New Mexico	18.8	26.7	8.0	37.1
Most-Gain Quintile	25.5	36.5	10.5	44.5
Next-Most-Gain Quintile	23.0	32.3	10.5	41.3
Middle-Gain Quintile	17.0	23.8	6.9	37.0
Next-Least-Gain Quintile	13.9	18.9	6.3	30.4
Least-Gain Quintile	17.5	23.9	7.4	35.3
Albuquerque	12.7	17.3	5.7	28.3

²For this analysis, we used the reduced aid figure for the four districts for which the AIR-formula calculates a loss in aid. AIR actually proposed a “hold harmless” provision that would have set a floor under these districts at their current aid level. But since our purpose is to evaluate the formula per se and its long run implications, without the political compromises that might surround its adoption in the short run, we ignore the hold harmless provision.

There is a consistent pattern across four socio-economic indicators. In general, as the proposed funding gain shrinks in each successive quintile, so does poverty, child poverty, unemployment, and adults without a high school diploma. In other words, as socio-economic conditions improve, the level of gain under the new formula is smaller. The exception is the Least-Gain quintile which exhibits a more challenging socio-economic profile than the Next-Least-Gain quintile on all four indicators and a more challenging profile than the Middle-Gain quintile on three of the four indicators.

Thus, increases resulting from the proposed formula would—for the most part—provide the most benefit to the state’s most economically challenged districts (more aid going where there is greater need; an equitable distribution). The exception is the quintile of school districts who would gain the least under the proposed formula; these 14 districts exhibit higher overall levels of economic stress than the 27 districts in the next two quintiles who gain more in state aid per pupil from the proposed funding formula. Again, the Least-Gain quintile districts are largely in or just east of the I-25 corridor north of Albuquerque and include some districts that gain little or even lose under the proposed new formula simply because they were treated quite well by the old formula. Five of the 14 receive over \$15,000 per pupil under the current formula: Mosquero (\$25,472), Roy Municipal (\$19,362), Maxwell (\$17,038), Wagon Mound (\$16,217), and Hondo (\$15,704). Four of these five (excluding Hondo) are in three adjacent Northeast New Mexico Counties (Harding, Mora, and Colfax).

All of the five have a child poverty rate that exceeds the state average, all except Maxwell by 10 to 25 percentage points. Maxwell and Hondo would receive very small gains under the proposed formula and Wagon Mound and Mosquero are two of only four districts that would actually lose funding. Mosquero is a very small district with declining enrollment, no identified ELL students, and very low transportation costs, all factors that result in reduced aid under the AIR formula.

Wagon Mound is a special case because it includes a residential treatment center for special education students. Accordingly, its special education population is very high. Under the current formula, special education funding is based on the actual count of identified students weighted according to four levels of severity. The AIR formula suggests shifting to a fixed weight and a count based on a uniform percentage of enrollment (out of concern that funding on the basis of identified student count leads to over-identification). Such an approach sharply lowers Wagon Mound’s state aide. The AIR plan also calls for a contingency fund from which the needs of high cost special education students could be funded on a case-by-case basis.

With regard to SES, then, we see that the distribution of gains resulting from the proposed formula is equitable in the sense that it generally provides greatest gains to districts facing the most severe challenges. Clearly some high needs districts will not do as well under this formula.

Demographic Characteristics

We next looked at demographic characteristics among the different categories (see Table 3).

Table 3 - Demographic Characteristics by Gain Categories

Category	Percent Urban	Percent Suburban	Percent Rural	Total
Greater New Mexico	25.7	39.8	34.4	100
Most-Gain Quintile	14.8	31.5	53.7	100
Next-Most-Gain Quintile	0.0	55.5	44.5	100
Middle-Gain Quintile	17.4	51.5	31.1	100
Next-Least-Gain Quintile	55.5	16.3	28.2	100
Least-Gain Quintile	37.2	39.9	22.9	100
Albuquerque	96.3	0.0	3.7	100

The Most-Gain quintile is predominantly rural, and the Next-Most-Gain quintile is also 44.5% rural (but predominantly suburban). Each successively lower gain quintile is proportionately less rural. This is a reflection of the proposed formula's attention to differences in per pupil cost attributable to economies of scale and its favorable treatment of small districts. There is a statistically significant correlation between enrollment size and rural locale among school districts in New Mexico.

English Language Learners

We next looked at data related to the enrollment of students eligible for English Language Learner (ELL) services. See Table 4.

Table 4 - ELL Enrollment and Enrollment Shifts by Gain Categories

Category	Total Enrollment	ELL Enrollment	Percent ELL	ELL Enrollment Change 1999-2005	Percent Hispanic	Percent American Indian
Greater New Mexico	232,358	48,450	20.9%	14.2%	53.2%	13.7%
Most-Gain Quintile	37,746	12,883	34.1%	12.4%	75.2%	4.7%
Next-Most-Gain Quintile	45,712	10,537	23.1%	4.8%	38.5%	34.5%
Middle-Gain Quintile	48,940	5,760	11.8%	3.7%	43.8%	8.9%
Next-Least-Gain Quintile	43,490	9,187	21.1%	91.6%	46.7%	16.6%
Least-Gain Quintile	56,470	10,083	17.9%	-4.4%	63.7%	4.8%
Albuquerque	95,431	13,936	14.6%	-11.6%	52.6%	4.7%

The Most-Gain quintile has the highest number (12,883) and highest incidence (34.1%) of ELL enrollment and of Hispanic enrollment (75.2%), and the second fastest rate of increase of ELL enrollment between 1999 and 2005 (12.4%). As we found with regard to SES measures, this again suggests that the formula provides the most benefit to districts with the greatest needs.

The Least-Gain quintile has the lowest incidence of ELL enrollment (17.9%) and it is the only quintile where ELL enrollment fell from 1999 to 2005 (-4.4%). Districts in this quintile do have above average Hispanic enrollment (63.7%). This combination of findings suggests that these districts serve, for the most part, Hispanic students who are not recent immigrants, again largely in the I-25 corridor north of Albuquerque and including Espanola.

The Middle-Gain quintile has the lowest incidence of ELL enrollment, and below-average rate of ELL enrollment change and of Hispanic and American Indian enrollment.

The Next-Least-Gain quintile has near average Hispanic and American Indian enrollment, near average incidence of ELL enrollment, but by far the fastest rate of gain in ELL enrollment at 91.6% growth between 1999 and 2005. These gains are, however, concentrated in just three districts – Santa Fe, Rio Rancho, and Central Consolidated. These three districts accounted for nearly all the net gain of ELL students in the quintile. In Santa Fe's case, the district went from a reported zero percent ELL enrollment in 1999 to a 19.9% ELL enrollment in 2004-05, possibly a change in standards for classifying students as ELL. Central Consolidated is located in Shiprock, on the Navajo Reservation, and is 93% American Indian enrollment. Again, increasing the number of ELLs by over 50% in five years to a point where over half the students are classified ELL during a period when overall enrollment, American Indian enrollment, and Hispanic enrollment were all in decline, implies a change in classification policy more than an influx of new students. Rio Rancho's increase in ELL enrollment from 344 to 677 students, for a total of 4.6% ELL enrollment could be due to a 50% increase in enrollment of Hispanic students so that they now constitute nearly one-third of the student population.

Overall, the average net increase in ELL enrollment for the Next-Least-Gain districts suggests special cases and local policy changes more than a demographic change pattern. Where dramatic growth or shifts in the student ELL population puts extraordinary demands on schools to provide services, sufficient resources must be available if they are to provide those services. This raises the larger issue of whether the proposed formula's handling of language issues is appropriate to a state with such a diverse set of language learning needs.

Collectively, findings here again suggest equity in the benefits derived from the proposed formula *for most districts*. Here too there are exceptions, however, indicating that the benefits of the proposed formula do not extend to all districts in need.

Race

We next looked at race/ethnicity characteristics of districts in the different categories (see Table 5).

Table 5 - Race/Ethnicity by Gain Categories

Category	Percent American Indian	Percent Hispanic	Percent Hispanic and American Indian	Percent White Non-Hispanic
Greater New Mexico	13.7	53.2	68.9	30.6
Most-Gain Quintile	4.7	75.2	79.9	20.4
Next-Most-Gain Quintile	34.5	38.5	73.0	25.6
Middle-Gain Quintile	8.9	43.8	52.7	45.6
Next-Least-Gain Quintile	16.6	46.7	63.3	30.3
Least-Gain Quintile	4.8	63.7	68.5	28.7
Albuquerque	4.7	52.6	57.3	34.4

The Most-Gain quintile is predominantly Hispanic, and three fourths of the Next-Most-Gain quintile is about evenly split between Hispanic and American Indian students. Hispanics also dominate the Least-Gain quintile. White non-Hispanics are disproportionately present in the Middle-Gain quintile. Overall, the proposed funding formula would shift funding moderately toward schools with higher percentages of Hispanic and American Indian students.

District Size and Enrollment Change

We next examined the distribution of enrollment size and enrollment shifts among the categories (see Table 6).

Table 6 - Enrollment and Enrollment Shifts by Gain Categories

Category	Total Enrollment	Average Enrollment	15 Yr. Enrollment Shift (%)	10 Yr. Enrollment Shift (%)	5 Yr. Enrollment Shift (%)
Greater New Mexico	232,358	2,640	11.2	-2.3	-2.7
Most-Gain Quintile	37,746	1,301	18.3	1.3	-2.2
Next-Most-Gain Quintile	45,712	2,540	-4.0	-9.1	-5.4
Middle-Gain Quintile	48,940	3,059	1.8	-10.0	-6.9
Next-Least-Gain Quintile	43,490	3,954	39.7	11.5	1.5
Least-Gain Quintile	56,470	4,034	13.4	-0.2	0.5
Albuquerque	95,431	95,431	7.7	4.9	9.3

Smaller districts fare very well under the proposed formula change. Average district enrollment decreases with each successively higher gain quintile, although the difference between the Least-Gain and Next-Least-Gain quintiles is very small. Districts in the two quintiles benefiting the least from the proposed formula have an average enrollment about three times larger than the districts in the Most-Gain quintile. There are small districts in all five quintiles, however. In fact, 5 of the 14 districts in the Least-Gain quintile have fewer than 200 students, and two of only four districts that actually lose funding under the AIR proposal (Wagon Mound and Mosquero) have fewer than 200 students. On the other hand, 21 of the 29 districts in the Most-Gain quintile have fewer than 1,000 students.

Both Wagon Mound and Mosquero receive substantial per pupil aid under the current formula (over \$16,000 and \$25,000 respectively). Mosquero would lose about 15% of that funding under the proposed formula, but would still be the largest state aid recipient on a per pupil basis. Wagon Mound, on the other hand, loses over one-third of its per pupil state aid despite the fact that it has the highest poverty level in the state (based on the percentage of Title I eligible children). This is, for reasons noted above, related to its special circumstance with respect to special education.

Overall, between 1989 and 2005, Greater New Mexico grew in enrollment by 11.2%. Most of that growth was in the early part of that period, however, and the net change over the most recent five and ten year periods has been slightly negative. The three highest-gain quintiles all show enrollment declines in the most recent five-year period. The only quintile to show enrollment gain over all three time periods is the Next-Least-Gain quintile which grew nearly 40% over the 15 year time frame but which grew very little over the most recent five-year period. The Next-Most-Gain quintile is the only one to show enrollment declines over all three time frames. The Least-Gain quintile grew during the early stages of the 15 year time frame but has been essentially stagnant in the five and ten year time frames since then. The Most-Gain quintile grew significantly in the early stage of the 15 year time frame but slowed to near zero gain over the ten-year frame and has suffered declining enrollment over the most recent five-year period.

In general, then, districts that experienced the biggest enrollment gains over the longer (15 year) period are divided among the biggest gainers and the smallest gainers. Districts experiencing the smallest enrollment shifts cluster in the Middle-Gain and Next-Most-Gain quintiles. The more short-term period of enrollment shift (5 year), shows a relationship between declining enrollment and gain from the proposed formula. The relationship is not linear, however; while the Most-Gain, Next-Most Gain, and Middle-Gain quintiles all experienced enrollment decline during that 5 year period, the pattern is the reverse of what might be expected (the Most-Gain quintile experienced the smallest decline of the three; the Middle-Gain quintile experienced the largest decline). So while the formula is clearly responsive to enrollment decline, it (declining enrollment) is not driving the outcomes.

Academic Achievement

We next examined the relationship between gain categories under the proposed formula and academic achievement as measured by the percentage of students scoring at the “proficient” or “advanced” levels on state-required achievement tests (see table 7). We used scores reported by the state for the “All Students” category at grades 3, 4, 5, 6, 7, 8, 9, and 11, and considered reading, math, science, and a composite of the three subject matter scores.

Table 7 - Proficiency by Gain Categories

Category	% Proficient Reading	% Proficient Math	% Proficient Science	% Proficient Combined
Greater New Mexico	50.3	31.2	40.4	40.6
Most-Gain Quintile	45.7	26.6	33.6	35.4
Next-Most-Gain Quintile	44.9	26.9	35.5	35.8
Middle-Gain Quintile	54.6	34.2	45.2	44.6
Next-Least-Gain Quintile	54.0	35.5	44.0	44.5
Least-Gain Quintile	51.6	32.2	42.0	41.9
Albuquerque	52.0	34.6	43.2	43.3

The Most-Gain quintile had the lowest proficiency rate in two of three subject matter content areas and in the composite. The Middle-Gain quintile had the highest proficiency rates in two of three subject matter content areas and in the composite. The Least-Gain quintile had lower proficiency rates than either the Next-Least gain or Middle-Gain quintiles on all four proficiency measures.

The proposed formula does not attempt to target additional funds to low-performing districts. Still, given the close relationship between socio-economic challenges and student achievement (i.e., relationships described in research on achievement gaps between impoverished and affluent student populations) and the formula's targeting of low-SES districts, we would expect to see a close and linear relationship. That many low-performing districts clustered in the Least-Gain quintile suggests that the benefits of the proposed formula will not make it to some of the districts most in need of improvement in academic outcomes.

Locale Code Analysis³

Lastly, we looked at characteristics of districts in different locales (see Table 8).

³ The NCES locale code definitions are:

- 11 = City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more.
- 12 = City, Midsize: Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
- 13 = City, Small: Territory inside an urbanized area and inside a principal city with population less than 100,000.
- 21 = Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
- 22 = Suburb, Midsize: Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
- 23 = Suburb, Small: Territory outside a principal city and inside an urbanized area with population less than 100,000.
- 31 = Town, Fringe: Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.
- 32 = Town, Distant: Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
- 33 = Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area.
- 41 = Rural, Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
- 42 = Rural, Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.
- 43 = Rural, Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

Table 8 - General Characteristics by Locale Code

Category	No. Dists.	Enrollment	Avg. Enrollment	Percent Poverty	Percent American Indian	Percent Hispanic	Percent Proficient, Combined	Percent Change in State Aid
Locale Codes 13, 21,23, 31, and 32	10	90,278	9,028	14.7%	9.0%	54.8%	43.3%	9.8%
Small Town Remote (33)	24	79,951	3,331	20.2%	5.5%	55.1%	41.5%	18.1%
Rural Fringe (41)	4	23,452	5,863	17.8%	2.0%	71.3%	42.6%	18.0%
Rural Distant (42)	4	3,204	801	19.5%	9.9%	73.4%	39.2%	12.5%
Rural Remote (43)	46	35,473	771	27.2%	52.0%	31.2%	31.2%	21.7%
Albuquerque (11)	1	95,431	95,431	12.7%	4.7%	52.6%	43.3%	9.9%

New Mexico has school districts located in 10 of the 12 locale codes used by the National Center for Education Statistics (none in Midsize Cities [locale code 12], or Midsize Suburbs [locale code 22]). It has only one in the Large City (code 11)--Albuquerque; three in Small City (code 13)--Farmington, Las Cruces, Santa Fe; two in Large Suburb (code 21)--Bernalillo and Rio Rancho; one in the Small Suburb (code 23)--Aztec Municipal; two in the Town Fringe (code 31)--Bloomfield Municipal and Las Lunas; and two in Town Distant (code 32)--Belen Consolidated and Espanola.

Most New Mexico districts are in the Small Town Remote locale code 33 (24 districts) or one of the three Rural locale codes (4 districts in Rural Fringe code 41, 4 districts in Rural Fringe code 42, and 46 districts in Rural Remote code 43).

The Rural Remote districts have the highest average poverty rate, the highest American Indian enrollment, the highest combined American Indian and Hispanic enrollment rate, the lowest combined proficiency rate, and the smallest average district size. These districts, on average, receive the largest percentage increase (21.7%) and absolute increase in funding under the AIR proposal.

The 24 Small Town Remote districts serve twice as many students in half as many districts as the Rural Remote and have the next highest poverty rate, a lower average American Indian enrollment rate but a much higher Hispanic enrollment rate. These districts have the highest average White, non-Hispanic enrollment rate (36%) in Greater New Mexico. The proficiency rate among these districts is near the state average. The average state aid to these districts increases 18.1%.

That rate is almost identical to the 18.0% increase for the Rural Fringe districts, but the averages for that category are misleading for many of the indicators because the category includes only four districts and two of them are Gadsden (with over 13,000 students, a 30% poverty rate and a 26% increase in state aid) and Los

Alamos (with 3,600 students, a 3.9% poverty rate, and a 6.4% decrease in state aid). The four Rural Distant districts are also highly variable.

Conclusions

Based on this analysis, the funding formula developed by AIR and proposed by the Funding Formula Task Force increases funding for nearly all New Mexico school districts, and—generally—provides greater increases for districts with greater needs. Indeed, the formula very clearly does what it purports to do. The key phrase in this statement, of course, is *what it purports to do*. The AIR report cites four merits of the proposed formula:

- The formula is simple, avoiding unnecessary complexity by focusing directly on the factors associated with pupil need and scale;
- The formula is fair, promoting and preserving funding equity reflecting differences in the challenges faced by various districts
- The formula uses adjustment factors that are largely beyond a district's control, thus minimizing the incentive to pursue funding that is not directly linked to student needs.
- The formula is comprehensive – It accounts for most of the adjustments in the current funding formula.

The formula is not without limitations. To fully understand its limitations and to appreciate the implications for New Mexico schools and communities, it is useful to examine each of these merits in turn.

Simplicity

The proposed formula clearly offers a simplification over the current formula—namely by reducing the number of factors in the formula used to adjust the base cost and account for variation in the level of specialized needs among the student population.

In order to reduce the number of factors, developers of the proposed formula collapsed multiple factors into single factors. For example, in the current formula, special education students are weighted differently depending on the specific disability of the child—thus a child with a mild learning disability receives a much smaller “weight” than a child with severe cognitive and physical challenges requiring much more intensive treatment and support. However, the AIR proposed formula assumes that variation in the level of challenges among the student population is distributed more or less equally across New Mexico districts. Therefore, each student identified as qualifying for special education services receives the same weight. This certainly simplifies things. But the proposed formula probably oversimplifies in this regard. The levels of challenges faced by children qualifying for special education services can vary dramatically from school district to school district (and from year to year within the same school district). The enrollment of a single child with severe physical and cognitive challenges in a small district could conceivably double the level of resources needed to provide appropriate services for the special education population of that district. The proposed formula does not account for variations in the level of resources needed as a result of variations in the level

of challenges faced by special education student populations. It relies instead on the probability that these variations will be evenly distributed among districts. But probabilities are notoriously unreliable when dealing with small units or populations, and New Mexico public school districts are predominantly small in enrollment.

Not part of the formula but listed separately as a recommendation, the AIR team suggests establishing a contingency fund from which districts can apply for money to help pay for the cost of educating high-cost special education students in their districts. If adopted, such a contingency fund would establish a mechanism for funding services for high cost special education students. The fund would operate on terms similar to an insurance pool.

There are limitations with this approach, however: (1) the fund is intended to help in meeting “extraordinary” needs, not in accounting for the variation in needs across a broad continuum of challenges (thus, it is still based on a one-size-fits-all model, and has the potential to create or maintain inequities—e.g., a school district with a sizable special education population comprised primarily of students with mild learning disabilities would fare much better under this system than a school district with a moderately sized special education population including several students with somewhat more severe (even if not necessarily extraordinary) challenges; (2) the fund is held by the state, and school districts must request resources via an approval process (as opposed to the existing system where resources to meet varying student needs is built into the established receipts as an entitlement), adding a layer of bureaucracy and diminishing a district’s right to and/or immediate access to the funding. In a sense, the proposal may simplify the formula for the state while complicating the process for the school districts. We would caution that the administrative cost of accessing this fund – of filing a claim – must be kept very low or else it will not be equally available to special needs students in small rural districts with lean administrative staff.

Fairness

The proposed formula indeed promotes fairness, as demonstrated by our analysis here showing—generally—greater funding gains among school districts facing greater challenges. It is important to note, however, that claims about equity in funding distributions are based on the specific measures of challenges that we used in our analyses and AIR used in their proposed formula. There are, in fact, other school district and community characteristics that could be used for analysis, and other factors that could have been incorporated into the formula. For example, in the current formula, students qualifying for gifted and talented education services are weighted (as a category of exceptional children, along with special education counts). The proposed formula does not include a factor for gifted and talented (G&T) students (the rationale offered for their exclusion is that the proportional size of the G & T population is—or should be—roughly the same across all New Mexico school districts; thus, the cost of providing services is captured in the base costs developed from the prototype schools). Thus, funding under the proposed formula is distributed equitably per the factors selected for inclusion in the formula equation; variations among district needs that are not represented by factors in the formula (like gifted and talented education) create inequities. Funding to support gifted and talented programs will need to come from general fund dollars, impacting all students.

Minimizing Incentives

Elements of the formula and accompanying recommendations presume that some school districts practice over-identification of students in categories that generate additional revenue. We have no way of knowing the extent of this practice (nor does AIR; they do not report any evidence). One example of how the proposal seeks to address this presumed problem is by applying the statewide average special education rate (16%) to every district. By comparison, in 2005-2006, the actual district percentages ranged from 11% to 50%. This approach presumes that the proportion of students requiring special education services in a district is the same across the state. While extremes in the actual percentages recommend close investigation (and possibly some intervention and oversight of selected districts) the overall variance is normally distributed (a bell curve) suggesting the need for an approach that recognizes legitimate variation. To do otherwise would be to throw out the baby with the bathwater. The horns of the dilemma on this are clear. If providing categorical revenue for special services earmarked for eligible students creates an incentive to over-identify these students, rolling funding for those services into a uniform factor that disconnects the revenue from the student who needs the services creates an incentive to under-identify -- and under-serve eligible students.

For small school districts, the incentive to under-identify is great. If a district with 400 students has 64 special education students (16%), adding one more to the fold adds 1.6% to cost (assuming that student is an average-cost special education student. If a district with 4000 students has 640 special education students (again, 16%), adding 1 more average-cost student will increase cost by 0.16%. Under this plan, there will be a far more powerful incentive to under-identify special education students in New Mexico's smaller rural districts.

Accounting for Most Factors From the Old Formula

The key phrase here is “accounting for.” An example of the ways in which the proposed formula accounts for elements in the current formula is funding for bilingual programs. In the current formula, the count of students eligible for bilingual services is included as a factor. In the proposed formula, an ELL factor is included to serve as “an indicator of the need for multi-cultural and various language-related services for students.” Whether the single factor will adequately provide funding to *account for* varied services is uncertain. What is not uncertain is that advocates for bilingual education programs will be hampered by the loss of transparency in the process. Because funding for bilingual programs will be part of a pool of money supporting various services, parents, community activists, and others who advocate for bilingual programs will be unable to gauge the level of support school districts can be expected to provide for bilingual services. Will these programs be self-selection programs that tend to bypass less gifted students and others whose need is greater? Will teachers be certified in bilingual instruction? Will home language instruction receive sufficient emphasis? Parents, community members, and others will be less able to hold school district officials accountable for providing key services in this area. The legislature should consider ways to stiffen the resolve to provide quality bilingual instruction under this new funding formula.

The teacher training and experience (T&E) index is another factor in the current formula that is accounted for by alternate means in the AIR-proposed formula. The T&E Index is a weight used to adjust funding to school districts based on the variables associated with higher teacher pay (years of teaching experience and

⁴The AIR report excludes the 50% rate (Wagon Mound School District) from their discussion of the state range, citing the district's enrollment of students from a high school with an extraordinarily high special education enrollment. The next highest rate after Wagon Mound is 35%.

extent of credentialing). The fact that such a weight sends additional funding to districts that already have higher quality teachers has led to criticism that the T&E Index compounds inequity in funding among New Mexico school districts. The AIR proposal recommends replacing this index with a new Index of Staff Qualifications (ISQ). Our review of the ISQ weights assigned to districts suggests that the new weights soften the T&E Index's inherent bias against smaller districts with less qualified teaching staffs (in no small part because of the 1.00 minimum weight and the fairly narrow overall range of weights). Generally speaking, the ISQ looks to be an improvement over the T&E Index. Nevertheless, we recommend that its use be carefully evaluated for equity effects before implementation.

Summary

Overall, the proposed formula increases funding across the board to almost all districts to a greater or lesser degree. It sends the most new money to areas of greatest need, as defined by the developers of the formula. In general, it especially benefits districts with the most severe socio-economic challenges, high levels of English Language Learners, small numbers of students, the most remote rural locations, and those with the lowest levels of academic achievement. It does so in ways that ignore some other needs, however, and shifts funding from categorical and (semi) categorical sources to general sources and from district entitlement to state-controlled supplementary sources. It is these latter shifts that raise concerns because their effect is indeterminate. The net result may be that some specialized programs will be more easily ignored or under-funded. Close scrutiny of such after-effects will be important. But there is little doubt that this formula would put New Mexico out front among states working to improve both the adequacy and the equity of their school funding systems.

Appendix A. Gain Quartiles

Smallest Gain (-35.0% to +7.7%)

WAGON MOUND PUBLIC SCHOOLS
MOSQUERO MUNICIPAL SCHOOLS
LOS ALAMOS PUBLIC SCHOOLS
PECOS INDEPENDENT SCHOOLS
MAXWELL MUNICIPAL SCHOOLS
HONDO VALLEY PUBLIC SCHOOLS
WEST LAS VEGAS PUBLIC SCHOOLS
ESPAÑOLA MUNICIPAL SCHOOLS
LOS LUNAS PUBLIC SCHOOLS
CARLSBAD MUNICIPAL SCHOOLS
BERNALILLO PUBLIC SCHOOLS
ROY MUNICIPAL SCHOOLS
LOVINGTON PUBLIC SCHOOLS
LAS CRUCES PUBLIC SCHOOLS

Next Smallest Gain (+7.7% to +11.6%)

CHAMA VALLEY INDEPENDENT SCHLS
RIO RANCHO PUBLIC SCHOOLS
GRADY MUNICIPAL SCHOOLS
MELROSE PUBLIC SCHOOLS
COBRE CONSOLIDATED SCHOOLS
SPRINGER MUNICIPAL SCHOOLS
SILVER CONSOLIDATED SCHOOLS
CIMARRON MUNICIPAL SCHOOLS
SANTA FE PUBLIC SCHOOLS
CENTRAL CONSOLIDATED SCHOOLS
LAS VEGAS CITY PUBLIC SCHOOLS

Middle Gain (+11.8% to +17.7%)

ARTESIA PUBLIC SCHOOLS
LAKE ARTHUR MUNICIPAL SCHOOLS
MORIARTY MUNICIPAL SCHOOLS
MAGDALENA MUNICIPAL SCHOOLS
SANTA ROSA CONSOLIDATED SCHOOL
FT SUMNER MUNICIPAL SCHOOLS
AZTEC MUNICIPAL SCHOOLS
VAUGHN MUNICIPAL SCHOOLS
RUIDOSO MUNICIPAL SCHOOLS
ROSWELL INDEPENDENT SCHOOLS
FARMINGTON MUNICIPAL SCHOOLS
PORTALES MUNICIPAL SCHOOLS
QUESTA INDEPENDENT SCHOOLS
BELEN CONSOLIDATED SCHOOLS
CORONA MUNICIPAL SCHOOLS
ALAMOGORDO PUBLIC SCHOOLS

Next Highest Gain (+18.1% to +24.9%)

RESERVE INDEPENDENT SCHOOLS
MESA VISTA CONSOLIDATED SCHLS
JEMEZ MOUNTAIN PUBLIC SCHOOLS
BLOOMFIELD MUNICIPAL SCHOOLS
MORA INDEPENDENT SCHOOLS
POJOAQUE VALLEY PUBLIC SCHOOLS
GRANTS-CIBOLA COUNTY SCHOOLS
DORA CONSOLIDATED SCHOOLS
ZUNI PUBLIC SCHOOLS
CLOVIS MUNICIPAL SCHOOLS
GALLUP-MCKINLEY COUNTY SCHOOLS
MOUNTAINAIR PUBLIC SCHOOLS
TRUTH OR CONSEQUENCES SCHOOLS
LORDSBURG MUNICIPAL SCHOOLS
CLAYTON PUBLIC SCHOOLS
RATON PUBLIC SCHOOLS
JEMEZ VALLEY PUBLIC SCHOOLS
HOBBS MUNICIPAL SCHOOLS

Highest Gain (+25.0% to +53.4%)

CLOUDCROFT MUNICIPAL SCHOOLS
GADSDEN INDEPENDENT SCHOOLS
LOGAN MUNICIPAL SCHOOLS
TUCUMCARI PUBLIC SCHOOLS
TULAROSA MUNICIPAL SCHOOLS
QUEMADO INDEPENDENT SCHOOLS
PENASCO INDEPENDENT SCHOOLS
JAL PUBLIC SCHOOLS
SOCORRO CONSOLIDATED SCHOOLS
HATCH VALLEY MUNICIPAL SCHOOLS
TAOS MUNICIPAL SCHOOLS
ANIMAS PUBLIC SCHOOLS
DEMING PUBLIC SCHOOLS
LOVING MUNICIPAL SCHOOLS
DEXTER CONSOLIDATED SCHOOLS
HAGERMAN MUNICIPAL SCHOOLS
DES MOINES MUNICIPAL SCHOOLS
CAPITAN MUNICIPAL SCHOOLS
ESTANCIA MUNICIPAL SCHOOLS
TEXICO MUNICIPAL SCHOOLS
ELIDA MUNICIPAL SCHOOLS
DULCE INDEPENDENT SCHOOLS
SAN JON MUNICIPAL SCHOOLS
CUBA INDEPENDENT SCHOOLS
TATUM MUNICIPAL SCHOOLS
EUNICE MUNICIPAL SCHOOLS
FLOYD MUNICIPAL SCHOOLS
CARRIZOZO MUNICIPAL SCHOOLS
HOUSE MUNICIPAL SCHOOLS

Appendix B. Regional Distribution of Gain Quintiles

